# Harlan Reservoir 2009 Angler Survey Summary



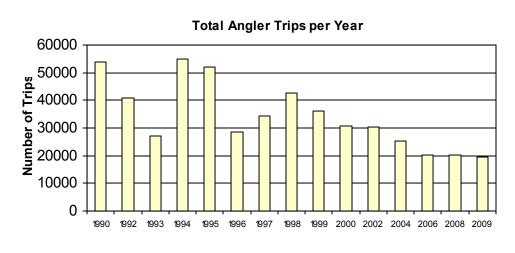
Brad Newcomb, District Manager

An angler survey was completed at Harlan Reservoir from April through October 2009. During this time period, anglers were counted and interviewed on 20 randomly selected days per month, which included 14 weekdays and 6 weekend days. A total of 140 days were surveyed with 978 interviews. Angler surveys provide estimates of angling pressure, catch and harvest, catch per hour, and sizes of fish caught. From 1990 to 2000, angler surveys were completed annually, but changed to an alternate year format from 2002 to 2008. Starting in 2009, a contract for annual angler surveys at Harlan is planned through 2013.

The following text and graphs provide summaries of this year's survey data with comparison to past years.

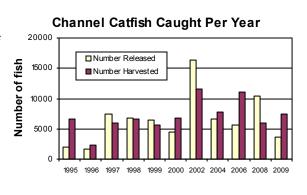
# **Angler Trips**

An estimated 19,679 angler trips were made to Harlan Reservoir during the seven month survey period in 2009, which continued a downward trend since 1998. Extensive flooded vegetation associated with high reservoir levels contributed to difficult fishing conditions and low angler use. Anglers spent 75,912 hours fishing, with the average trip lasting 3.9 hours. Forty three percent of Harlan anglers sought white bass, 23% sought channel catfish, 19% sought walleye, and 14% fished for anything. The following Nebraska counties contributed the most Harlan anglers: Harlan (22%), Adams (14%), Buffalo (11%), Lancaster (5%), Hall (5%), and Phelps (4%). Non-residents made up 6% of all anglers.



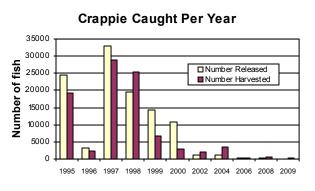
#### **Channel Catfish**

Harvest of channel catfish was higher than 2008, but numbers of released catfish decreased. A total of 11,115 fish were caught, with 7,497 harvested and 3,617 released. The average length of harvested catfish was 21 inches. The total catch rate for anglers seeking channel catfish was 0.60 fish/hour, with a harvest rate of 0.53 fish/hour. Catfishing was the highlight of the 2009 angling season. Apparently, the new catfish regulation that went into effect in 2009, reducing the daily bag limit to five fish, did not reduce catfishing pressure or catch.



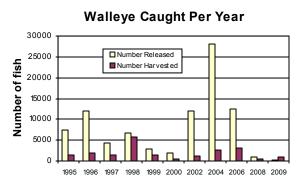
### Crappie

Crappie catch from 2002 through 2009 was very low compared to the late 1990's. Estimated total catch of crappie in 2009 was 305, with 283 harvested and 21 released. There has been excellent crappie recruitment with high water levels from 2007-2009, and future crappie fishing should improve.



# Walleye

Walleye catch was very low again in 2009. Both harvest (871) and release (294) numbers were near long-term lows. Extensive flooded vegetation associated with high reservoir levels contributed to difficult fishing conditions, and especially impacted walleye fishing success. Catch per hour for anglers seeking walleye reflected the difficult fishing conditions, with a total catch rate of 0.06 walleye per hour and a harvest rate of 0.05 fish per hour. That equates to walleye anglers averaging 17 hours to catch a walleye,

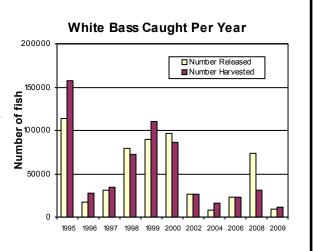


and 20 hours to harvest a walleye. With improved walleye recruitment and reduced flooded vegetation over time, walleye fishing success should improve in future years.

To be consistent with other Nebraska reservoirs, a new walleye fishing regulation went into effect in 2009. The new regulation wording is: "a daily bag limit of four may include one walleye from 15 through 18 inches and three over 18 inches or four over 18 inches, but no more than one over 22 inches in length allowed in the daily bag". This regulation has been in effect at Merritt Reservoir for many years and has shown promising results. Impacts at Harlan Reservoir will be monitored over the next few years to determine its success.

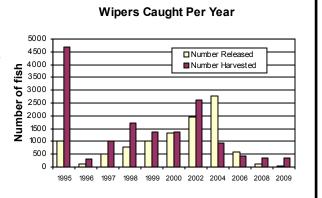
#### White Bass

White bass anglers saw reduced success in 2009. Harvest (11,622) and release (9,506) were near the lowest recorded in the last 10 years. The average length of harvested white bass was 13.1 inches. Catch rates for anglers seeking white bass were poor, with 0.53 fish caught per hour and 0.27 harvested per hour. The poor white bass fishing experienced in 2009 was similar to poor results obtained in the Game and Parks netting survey. Abundant flooded vegetation and uneven fish distribution are possible explanations for these declines. Hopefully, white bass fishing will rebound in future years.



# **Wipers**

Anglers caught very few wipers again in 2009. Wiper catch has been low since 2006. The low wiper catch is the result of no stockings from 2000 through 2004. Recent wiper stockings in 2005 and 2008 should improve future wiper fishing. In 2009, there was an estimated harvest of 354 wipers and 36 released.

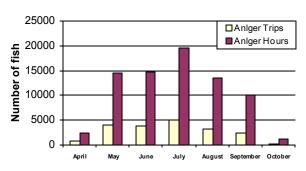


Monthly Estimates on Next Page...

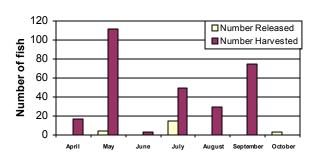
# 2009 Harlan Reservoir Angler Survey - Monthly Estimates

The following graphs show monthly estimates of fishing pressure and angler catch by species at Harlan Reservoir in 2009. Fishing pressure was fairly uniform across months, with highest fishing use in July and the lowest pressure in October. The best walleye catch occurred in July. Anglers had good success for channel catfish from May through September. White bass catch was fairly even across the months of May through August.

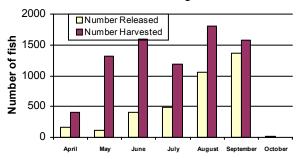
#### Fishing Pressure Per Month



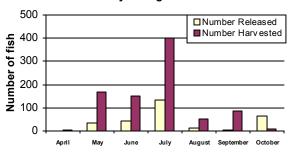
#### **Crappie Caught Per Month**



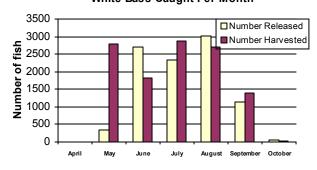
**Channel Catfish Caught Per Month** 



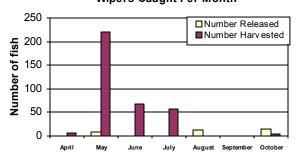
Walleye Caught Per Month



White Bass Caught Per Month



Wipers Caught Per Month



For additional information about fisheries management at Harlan Reservoir, please contact the NGPC Kearney office at 308-865-5310 or by email at the addresses listed below.

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